Defense Logistics Management System (DLMS) Introductory Training

Module 2

Course Structure

Module 1 – Introduction to the DLMS

Module 2 – Electronic Data Interchange (EDI) Basics

Module 3 - DLMS Implementation Strategy

Module 4 - ASC X12 EDI Definitions and Concepts

Module 5 - DLMS EDI

Module 5F – DLMS Financial

Module 6 – XML & Emerging Technologies

Module Structure

Module 2 - EDI Basics

- Background of EDI
- How EDI Works

Module 2 Objectives

Students will gain basic understanding of:

- **Definition of EDI**
- **The how and why EDI evolved into a standard**
- **Inner workings of EDI**

Background of Electronic Data Interchange

Definition of EDI

- **Electronic Data Interchange EDI is:**
  - ✓ The computer-to-computer interchange of strictly formatted messages that represent business documents
  - ✓ A sequence of messages between two parties, either of whom may serve as originator or recipient
  - ✓ The formatted data representing the documents transmitted from originator to recipient via telecommunications

Background of EDI

- **EDI "as DoD knows it," first emerged in 1962 with the Defense Logistics Standard System (DLSS)**
  - ✓ Computer-to-computer "EDI" process
  - ✓ Enabled DoD logistics managers and consumers to communicate electronically
  - ✓ A "proprietary" process
- **DoD, enabled by its own electronic network, was way ahead of the rest of the world at the time**

Industry-Wide EDI

- **Commercial EDI first emerged in the late 60's**
- **Has its roots in early days of information technology industry**
  - ✓ Mainframe computing era heritage
- **Goal: adoption of electronic data**
  - ✓ Use computers to exchange electronic documents
- **Objectives:**
  - ✓ Reduce paper documents
  - ✓ Eliminate delays in settlements and deliveries
  - ✓ Reduce cost

Transportation Data Coordinating Committee (TDCC)

- **Early 70's -- Transportation industry formed the TDCC**
  - ✓ Developed a syntax and data format
  - ✓ Developed 45 standard documents (transactions) which were common to industry functions:
    - ➢ Invoice, shipping notice, bill of lading, schedule, customs manifest, purchase order, etc.

American National Standards Institute (ANSI)

- **EDI gained recognition via a National Standard that began in 1979**
  - ✓ American National Standards Institute (ANSI) formed an EDI standards development committee
  - ✓ Accredited Standards Committee (ASC) X12
    - ➢ Consensus standards building group
    - ➢ Representation from major industries and Government

Why ASC X12?

- **Independent automation systems produced:**
  - ✓ Multiple proprietary formats
  - ✓ Different systems for multiple trading partners
  - ✓ Increased maintenance costs
  - ✓ Low efficiency
  - ✓ Incompatibilities
- **Benefits gained by using computers to electronically exchange documents were diminished by the increased costs and burden of multiple data formats**
- **Solution: A National Standard!**

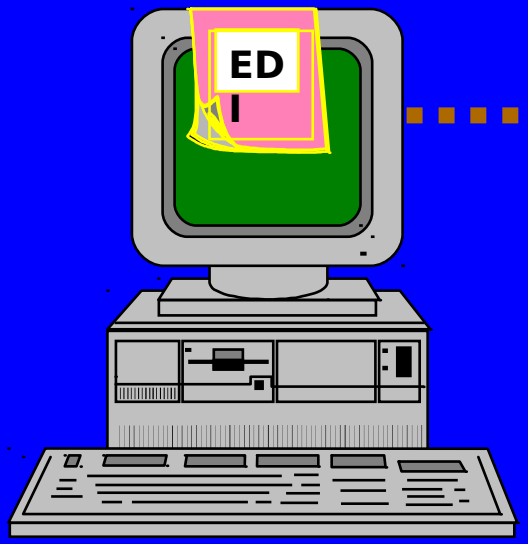
ASC X12 EDI Versions/Releases

- Versions are released approximately every five (5) years
- New releases of ASC X12 Draft Standards for Trial Use (DSTU), referred to as the 'Standards', are published annually

ASC X12 EDI Version/Release

Year Control	Version	Release	Version
2007	5	5	005050
2006	5	4	005040
2005	5	3	005030
2004	5	2	005020
2003	5	1	005010
2002	4	6	004060
2001	4	5	004050
2000	4	4	004040
1999	4	3	004030
1998	4	2	004020
1997	4	1	004010
1996	3	7	003070

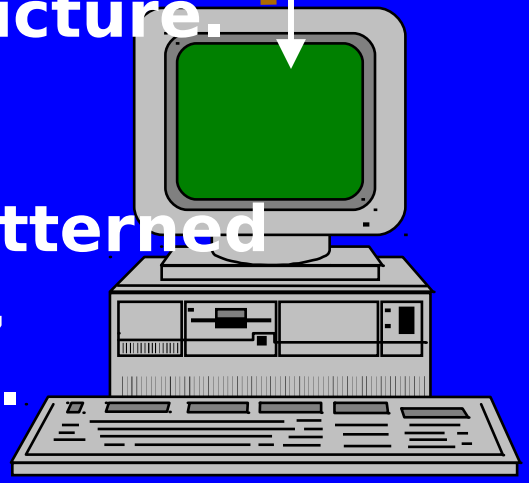
How EDI Works



EDI is the computer-to-computer exchange of routine business info in a standard format.

ASC X12 EDI provides a means for exchanging information between *dissimilar* computer systems via a standard file structure.

The information, in the form of a transaction set, is generally patterned after a conventional document, such as a requisition or invoice.



ASC X12 EDI

- **The ASC X12 EDI format is a computer-to-computer communication format -- not intended as a data entry format or report format**
- **EDI documentation is most often used as a specification guide for computer programmers to translate between EDI and application software**
- **Who uses this documentation?**
  - ✓ Service/Agency functional experts
  - ✓ System analysts
- **Who will NOT use it?**
  - ✓ Operational staff
  - ✓ End users

EDI Document Structure

The DLSS Fixed Format Requisition

RPs	Field Legend
01-03	Document Identifier
04-06	Routing Identifier
07	Media and Status
08-22	Stock Number
23-24	Unit of Issue
25-29	Quantity
30-43	Document No
44	Demand
45-50	Supplementary Address
51	Signal
52-53	Fund
54-56	Distribution
57-59	Project
60-61	Priority
62-64	Reqd. Delivery Date
65-66	Advice
67-69	Blank (Date of Rcpt on Referral/Passing Order)
70-80	Blank (Intra-Service

DLMS EDI Format

```
ST*511*00000001^
BR*00*A0*20000729*****131708^
N1*OB**10*FB2300**FR^
LX*1^
N9*TN*FB230093070001^
PO1**1*EA***FS*5910001234567^
DD*R*74^
LM*DF^
LQ*0*A01^
LQ*90*2A^
LQ*AL*777^
N1*Z4**M4*S9E**TO^
FA1*DY*D340^
FA2*B5*KZ^
```

Module 2 Quiz

Question 1: National EDI standards were advanced by the Accredited Standards Committee X12, or ASC X12, because multiple proprietary EDI formats between trading partners created inefficiencies, incompatibilities, and increased maintenance costs. What groups constitute the membership of ASC X12?

a) Government only

b) Industry only

c) Industry and government

Question 2: EDI documentation is most often used as a guide to translate between EDI and application software. Therefore, people who use EDI documentation are:

a) Functional experts and system analysts

b) Senior management

c) Operational staff and end users

Question 3: ASC X12 transactions are <u>best</u> suited for:

a) Online bill pay

b) High volume machine-to-machine transactions

End of Module 2